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The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A data storage device, comprising:

a storage medium;

nanometer-scaled data storage areas in the storage medium;

an energy-emitting tip positioned in close proximity to the storage medium;

a fluid medium positioned between the energy-emitting tip and the storage medium wherein the fluid medium comprises a ferrofluid; and

particles contained in the fluid medium.

2. (Original) The data storage device of claim 1, wherein the energy-emitting tip emits electrons.

3. (Original) The data storage device of claim 1, wherein the energy-emitting tip emits thermal energy.

4. (Cancelled)

5. (Original) The data storage device of claim 1, wherein the fluid medium comprises a high-dielectric fluid.

6. (Original) The data storage device of claim 1, wherein the particles comprise a material chosen from the group consisting of electrically conducting, dielectric and paraelectric materials.

7. (Original) The data storage device of claim 1, wherein the particles comprise a magnetic material.

8. (Original) The data storage device of claim 1, wherein the particles form a bridge between the tip and the storage medium.

9. (**Currently Amended**) A data storage device, comprising:

a storage medium;

nanometer-scaled data storage areas in the storage medium;

an energy-emitting tip positioned in close proximity to the storage medium **wherein the energy-emitting tip emits electrons**; and

molecules positioned between the energy-emitting tip and the storage medium wherein the molecules are at least partially immersed in a fluid medium.

10. (Original) Please cancel claim 10.

11. (**Currently Amended**) The data storage device of claim 9, wherein the energy-emitting tip **emits** thermal energy.

12. (Previously Presented) The data storage device of claim 9, wherein each of the molecules comprises a one-dimensional conductor molecule.

13. (Previously Presented) The data storage device of claim 12, wherein the one-dimensional conductor molecule comprises at least one type of molecule chosen from the group consisting of diols, polymers, surfactant, nanotubes and polymers.

14. (Previously Presented) The data storage device of claim 9, wherein the molecules comprise conductive molecules attached to the storage medium.

15. (Previously Presented) A method of data storage comprising:

providing a storage medium comprising nanometer-scaled data storage areas;

positioning an energy-emitting tip in close proximity to the storage medium;

guiding energy emitted from the energy-emitting tip to the storage area wherein the guiding step comprises channeling the energy emitted through particle in a fluid medium between the storage medium and the energy-emitting tip wherein the fluid medium comprises a ferrofluid; and

altering a state of the storage areas with the emitted, guided energy.

16. (Original) The method of claim 15, wherein the guiding step comprises channeling the energy emitted through conductor molecules positioned between the storage medium and energy-emitting tip.

17. (Previously Presented) The method of claim 16, wherein the guiding step comprises using conductor molecules wherein each of the conductor molecules comprises one-dimensional conductor molecules.

18. (Cancelled)

19. (Previously Presented) The method of claim 15, wherein the guiding step comprises using particles that form a bridge between the storage medium and the energy emitting tip.

20. (Cancelled)

21. (Previously Presented) A data storage device comprising:

a storage medium;

nanometer-scaled data storage areas in the storage medium;

an energy-emitting tip positioned in close proximity to the storage medium; and

particles contained in the fluid medium, wherein the particles comprise a magnetic material.

22. (Previously Presented) A method of data storage comprising:

providing a storage medium comprising nanometer-scaled data storage areas;

positioning an energy-emitting tip in close proximity to the storage medium;

guiding energy emitted from the energy-emitting tip to the storage area wherein guiding comprises channeling the energy emitted through particle in a fluid medium between the storage medium and the energy-emitting tip wherein the fluid medium comprises a ferrofluid; and

altering a state of the storage areas with the emitted, guided energy.

23. (Previously Presented) A data storage device comprising:

a data storage medium having a material property that is capable of changing a memory state under the influence of a directed beam of energy;

nanometer-scaled data storage areas in the storage medium;

at least one tip in close proximity to the storage medium, the tip configured to emit a directed high-power-density beam towards the data storage medium when the tip is in an energy emitting state;

a fluid medium positioned between the tip and the storage medium; and

dispersed particles of metallic material within the fluid medium, the dispersed particles having sufficient tolerances permitting alignment between the tip and storage medium along the directed high-power-density bema when the tip is in the energy emitting state to form a temporary wire-like column, the wire-like column facilitating the transfer of applied energy to change the memory state in a manner complementary to the material property.

24. (Previously Presented) The data storage device of Claim 23, wherein the wire-like column serves as a temporary conductor between the tip and the storage medium.

25. (Previously Presented) The data storage device of Claim 23, wherein the metallic material particles are magnetic material particles.

26. (Previously Presented) The data storage device of Claim 23, wherein the conductive particles do not adhere to the storage medium.

27. (Previously Presented) The data storage device of Claim 23, wherein the high-power-density beam emitted is an electron beam.

28. (Previously Presented) The data storage device of Claim 23, wherein the fluid medium is substantially dielectric in a relaxed state and locally conductive in an excited state, the aligned magnetic particles in along the directed high-power-density beam establishing the excited state.

29. (Previously Presented) A method of data storage comprising:

providing a storage medium comprising nanometer-scaled data storage areas;

providing a fluid medium upon the storage medium, the fluid medium including dispersed particles of metallic material;

positioning a tip in close proximity to the storage medium and the fluid medium, the tip configured to emit a directed high-power-density beam towards the data storage medium when the tip is in an energy emitting state;

generating a directed high-power-density beam from the tip towards the storage medium through the fluid medium, the dispersed metallic particles aligning between the tip and the storage medium along the directed high-power-density beam to form a wire-like column, the wire-like column facilitating the transfer of applied energy to a targeted storage area of the storage medium; and

altering a state of the targeted storage area with the directed high-power-density beam.

30. (Previously Presented) The method of claim 29, wherein the conductive particles re-disperse in the fluid medium upon removal of the high-power-density beam.

31. (Previously Presented) The method of claim 29, wherein the fluid medium is a ferrofluid.